IN THE CLAIMS:

Please amend the claims as follows:

1. (**Currently Amended**) A polymer electrolyte fuel cell, comprising:

a seal formed from a liquid thermosetting sealing agent, and

a lamination of separators and a membrane electrode assembly tightly sealed with the seal;

a gap formed between each separator and the membrane electrode assembly,

wherein said seal is formed by applying the liquid thermosetting sealing agent into **[[a]]** the gap ~~formed between each separator and the membrane electrode assembly~~, ~~and~~

thermally curing the liquid thermosetting sealing agent at a temperature in a range of from 100 to 130°C over a period of from 1 to 5 hours,

the liquid thermosetting sealing agent is based on a silicone series elastomer or isobutylene series elastomer, and

a viscosity of the liquid thermosetting sealing agent at application is from 1,000 to 9,000 Pa.s,

wherein upon curing, the seal has a permanent deformation of 60% or less when thermally aged at 90°C for 100 hours to retain the gap upon sealing.

2. (**Previously Presented**) The polymer electrolyte membrane fuel cell as claimed in claim 1, wherein a controlled temperature range for curing the liquid thermosetting sealing agent is a predetermined temperature of ± 5°C.

3. (**Previously Presented**) The polymer electrolyte membrane fuel cell as claimed in claim 1, wherein a controlled temperature range for curing the liquid thermosetting sealing agent is 120°C ± 5°C.

4. (**Previously Presented**) The polymer electrolyte membrane fuel cell as claimed in claim 1, wherein a hardness of the liquid thermosetting sealing agent after curing measured according to a hardness test using a durometer at shore A defined in JIS K 6253 is in a range of 30 to 70°C.

5. (**Canceled**)

6. (**Previously Presented**) A single cell making up a polymer electrolyte membrane fuel cell as claimed in claim 1, wherein in the lamination, the gap between each separator and the membrane electrode assembly is tightly sealed with said seal, said seal formed by thermally curing the liquid thermosetting sealing agent in the range of from 100 to 130°C over a period of from 1 to 5 hours as claimed in any one of claims 1 to 4.

7. (**Previously Presented**) A process for producing a polymer electrode fuel cell, comprising: a seal formed from a liquid thermosetting sealing agent, and a lamination of separators and a membrane electrode assembly tightly sealed with the seal, the seal formed by applying the liquid thermosetting agent into a gap formed between each separator and the membrane electrode assembly, the process comprising the following steps:

a step for applying the liquid thermosetting sealing agent into the gap formed between each separator and the membrane electrode assembly at an application rate

preset depending upon the viscosity of the liquid thermosetting sealing agent, and width and height of a resulting seal;

thermally curing the liquid thermosetting sealing agent at a temperature in the range from 100 to 130°C over a period of from 1 to 5 hours;

the liquid thermosetting sealing agent being based on a silicone series elastomer or isobutylene series elastomer, and the viscosity of said liquid thermosetting sealing agent at application is from 1,000 to 9,000 Pa.s; and

said liquid thermosetting sealing agent is based on a silicone series elastomer or isobutylene series elastomer, and the viscosity of said liquid thermosetting sealing agent during application is from 1,000 to 9,000 Pa.s, wherein upon curing, the seal has a permanent deformation of 60% or less when thermally aged at 90°C for 100 hours to retain the gap upon sealing.

Claims 8-10. (**Canceled**)